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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|------------------------|----------------------|
| 10/783,514 | 07/12/2004 | Bernard D. Gist | DN 03-021 | 7596 |
| 7590 | 11/22/2005 | | EXAMINER [REDACTED] | SAMPLE, DAVID R |
| Marvin J. Powell Minerals Technologies Inc. One Highland Avenue Bethlehem, PA 18017 | | | ART UNIT [REDACTED] | PAPER NUMBER 1755 |

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

YJ

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/783,514 | GIST ET AL. |
| | Examiner | Art Unit |
| | David Sample | 1755 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 08 September 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,3,4,6,7,9-13,15-20 and 22-34 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,3,4,6,7,10-13,15-17,20,22-28 and 31-34 is/are rejected.
- 7) Claim(s) 9,18,19,29 and 30 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date: _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Any rejections and/or objections, made in the previous Office Action, and not repeated below, are hereby withdrawn.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

Claims 1, 4, 11-13 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagle et al. (US 4,383,045).

Nagle et al. discloses a gunning composition comprising magnesia, sulfamic acid and calcium nitrate. See the abstract. Moreover, the reference discloses a magnesia raw material which contains 0.9 wt% CaO. See col. 4, lines 8-13. 0.9 wt% CaO anticipates the lower limit of “about 1 percent by weight” in view of the latitude in interpreting a range modified by “about”.

The recitations of claims 11-13 can be found in the reference at col. 6, lines 31-33.

Claims 1, 3, 6, 7, 10-13, 15 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 62-148377 ('377).

JP '377 discloses spray refractory composition (i.e., gunning composition) comprising refractory aggregate, sulfamic acid and calcium hydroxide. See Table 1, Example III of the translation.

The recitations of claims 6, 7, 11-13, 15 and 16 can be found in the reference in the translated abstract, the paragraph bridging pages 8 and 9, and table 1.

Claim Rejections - 35 USC § 103

Claims 20, 22, 24-27 and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 62-148377 ('377) as applied to claims 1, 3, 6, 7, 10-13, 15 and 16 above and further in view of the knowledge of one of ordinary skill in the art.

As noted above, JP '377 discloses a composition that anticipates claims 1, 3, 6, 7 and 10-13, 15 and 16. The reference differs from claims 20, 22, 24-27 and 31-34 by failing to disclose the inclusion of a wetting agent to the composition.

However, it would have been obvious to one of ordinary skill in the art to have used an additional component for its intended purpose. In other words, it would have been obvious use a wetting agent to cause wetting.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have added a wetting agent to the composition of JP '377 because the resultant composition will be more easily wetted by the water used in spraying.

Claims 20, 23, 24, 28, and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagle et al. (US 4,383,045) as applied to claims 1, 4, 11-13 and 17 above and further in view of the knowledge of one of ordinary skill in the art.

As noted above, Nagle et al. discloses a composition that anticipates claims 1, 4, 11-13 and 17. The reference differs from claims 20, 23, 24, 28 and 31-34 by failing to disclose the inclusion of a wetting agent to the composition.

However, it would have been obvious to one of ordinary skill in the art to have used an additional component for its intended purpose. In other words, it would have been obvious use a wetting agent to cause wetting.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have added a wetting agent to the composition of Nagle et al. because the resultant composition will be more easily wetted by the water used in spraying.

Response to Arguments

Applicant's arguments filed September 8, 2005 have been fully considered but they are not persuasive.

§ 102(b) Rejection over Nagle et al. (US 4,383,045)

Applicants assert that Nagle et al. requires the presence of calcium nitrate which is not "calcia" as defined by the instant claims. This argument is deemed persuasive, and the examiner no longer relies upon the teaching of calcium nitrate for anticipation.

Applicants assert that Nagle et al. discloses the use of boric acid, chrome oxide and calcium nitrate in the composition, whereas the present claims employ "consisting essentially of" claim language. "Consisting essentially of" claim language limits a claim to the recited ingredients and any ingredients which do not materially affect the novel and/or basic

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characteristics of the invention. See MPEP 2111.03. There is nothing of record to suggest that the addition of cited ingredients affects the novel and/or basic characteristics of the present invention.

Applicants assert, “one of ordinary skill in the art would not recognize the 0.9 percent CaO in the raw magnesia as contributing to Applicants invention.” The examiner interprets this argument to mean that CaO as an impurity does not fall within the meaning of calcia as used in the instant claims. This argument is not deemed persuasive because claims are provided with their broadest reasonable interpretation during examination, and CaO in the raw materials is deemed to anticipate the instant claims.

(Applicants note that calcium carbonate is not referred to in Nagle et al.; only the CaO as an impurity. This argument is now moot, however, the examiner notes that he mischaracterized the reference in the first action. Rather than calcium carbonate, Nagle et al. discloses the use of calcium nitrate. See col. 3, lines 60-62.)

§ 102(b) Rejection over JP 62-148377

Applicants argue that the ‘377 patent requires the presence of clay, bentonite, methyl cellulose, aluminum sulfate and boric acid, whereas claim 1 employs “consisting essentially of” language. As noted above, “consisting essentially of” claim language limits a claim to the recited ingredients and any ingredients which do not materially affect the novel and/or basic characteristics of the invention. See MPEP 2111.03. There is nothing of record to suggest that the addition of cited ingredients affects the novel and/or basic characteristics of the present invention.

§ 103(a) Rejection over JP 62-148377

Applicants argue that it would not have been obvious to substitute calcium hydroxide for the aluminum sulfate of the '377 reference. This argument is not what was meant by the rejection. The reference discloses employing Ca(OH)₂ in combination with aluminum sulfate. See Example III in Table 1. And, as noted above, aluminum sulfate is not precluded by the "consisting essentially of" recitation in claim 1.

§ 103(a) Rejection over Nagle et al. (US 4,383,045)

Applicants reiterate their arguments with respect to § 102(b) rejection in traversing the § 103(a) rejection. For the reasons stated above, these arguments are not deemed persuasive.

Allowable Subject Matter

Claims 9, 18, 19, 29 and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Sample whose telephone number is (571)272-1376. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (572)272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David Sample
Primary Examiner
Art Unit 1755